

# PATENT ABSTRACTS OF JAPAN

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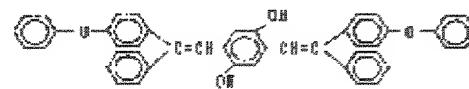
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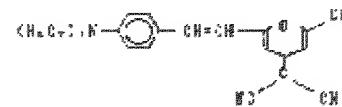
## (54) WHITE ORGANIC ELECTROLUMINESCENCE ELEMENT

### (57)Abstract:

**PURPOSE:** To provide a new white organic electroluminescence element having a specific construction, emitting white luminescence in high luminous efficiency and stability and suitable as a light-emitting element for various displays.



**CONSTITUTION:** The organic electroluminescence element is produced by sandwiching an organic compound containing luminescent layer between a pair of electrodes. At least one of the electrode is (semi) transparent. The luminescent layer has a laminated structure consisting of the 1st luminescent layer containing an organic compound having fluorescence peak wavelength of 380–480nm in solid state (e.g. the compound of formula I) and the 2nd luminescent layer containing an organic compound having a fluorescence peak wavelength of 480–580nm in solid state (preferably 8-hydroxyquinoline, etc.) laminated on the transparent electrode or anode in the order. At least one of the 1st luminescent layer, the 2nd luminescent layer and the other organic compound is incorporated with 0.1–10mol% (based on the organic compound constituting the layer) of an organic compound having fluorescence peak wavelength of 580–680nm in solution state (e.g. dicyanomethylenepyrane of formula II).



### LEGAL STATUS

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